



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

Y. Krisak
file 11-07-03 Chronar

ACTION MEMORANDUM

DATE: APR 15

SUBJECT: Request for a Removal Action at the Chronar Site in
Lawrence Township, Mercer County, New Jersey

FROM: *for* Donald Graham, On-Scene Coordinator
Removal Action Branch - Section A

K Callahan

TO: Constantine Sidamon-Eristoff
Regional Administrator

THRU: Kathleen C. Callahan, Director
Emergency and Remedial Response Division

K Callahan

Site ID#: 8A

I. PURPOSE

This Action Memorandum requests and documents approval of the proposed removal action described herein for the Chronar site, located at 330 Bakers Basin Road in Lawrence Township, Mercer County, New Jersey 08542. The site currently houses 130 compressed gas cylinders, many of which contain a variety of explosive, flammable and toxic gases. The site continues to meet the criteria for a removal action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as described in Section 300.415 of the National Contingency Plan (NCP). The funding requested is necessary to undertake mitigative measures which will eliminate the threat currently posed by the presence of the compressed gas cylinders located at the Chronar site. The removal action is anticipated to cost \$475,000, of which \$350,000 is for extramural cleanup contractor costs. There are no nationally significant or precedent-setting issues associated with the proposed removal action.

II. SITE CONDITIONS AND BACKGROUND

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) ID No. for this time-critical removal action is NJD070592498.

A. Site Description

1. Removal site evaluation

Until operations ceased as the result of bankruptcy in 1990, the Chronar site was operated as a research and production center for photovoltaic cells used in solar panels. Between April 1991 and September 1991, Chronar conducted a cleanup action with funds provided through bankruptcy court proceedings. The Potential Responsible Party (PRP) removal action addressed the packaged and drummed chemicals remaining on-site. However, 130 compressed gas cylinders (the cylinders) containing a variety of explosive, flammable, toxic, and otherwise extremely hazardous substances (as that term is used in 40 C.F.R. § 355 Appendixes A & B listing extremely hazardous substances) were not addressed as part of the 1991 cleanup action.

New Jersey Department of Environmental Protection and Energy (NJDEPE) was unable to take a timely response action and could not allow Chronar to treat the gas cylinders on site because they do not have a RCRA permit. Therefore, the site was submitted to EPA on May 31, 1991 for CERCLA removal action consideration. On June 4, 1991, Chronar submitted a draft work plan to the NJDEPE which proposed on-site treatment of the cylinders. However, Resource Conservation and Recovery Act (RCRA) requirements restrict such an operation without first obtaining the appropriate Transportation, Storage and Disposal Facility permits.

On June 13, 1991, EPA's Removal Action Branch (RAB) conducted a Removal Site Evaluation accompanied by NJDEPE and Chronar representatives. RAB's evaluation of the Chronar facility confirmed that the cylinders submitted for CERCLA removal action consideration were stored at the now abandoned facility. The site is only partially fenced and site security was terminated by the PRP as of May 7, 1991.

2. Physical location

The Chronar site is located at 330 Baker's Basin Road in Lawrence Township, Mercer County, New Jersey. The site is listed as Block 47 and Lot 73 on the Lawrence Township tax map. The site is in a semi-rural area and is located between an Elks Club and a trucking terminal. A number of private residences and industrial complexes are located within a one-mile radius. The Quakerbridge Mall, which is frequented by several thousand persons daily, is located approximately 1.5 miles from the site. See Appendix I.

3. Site characteristics

The site consists of a partially fenced 5 acre facility with a main building, a small warehouse/loading dock, and several small storage sheds. The unfenced portion of the site is bounded by heavily wooded areas with dense vegetation. An area at the rear of the site has undergone previous excavation due to environmental remediation activities. See Appendix I.

This will be the first EPA removal action at the site to remove the remaining 130 cylinders. As stated above and discussed below in Section II B, Chronar has removed all packaged and drummed chemicals from the site. Chronar has also returned approximately 50 of the original 180 cylinders to the manufacturers.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

While there has not yet been a release to the environment, the possibility of a gaseous release from the cylinders remains a constant threat. A complete inventory of the cylinders has been provided by Chronar and is included as Appendix II. The inventory identifies listed and unlisted extremely hazardous substances under Section 101 (14) of CERCLA. Appendix II.

5. NPL status

This site is not on the NPL and has not been proposed for designation. Once the remaining cylinders are removed and disposed of, the immediate threat will be eliminated and any additional environmental concerns will be addressed through NJDEPE's Environmental Cleanup and Responsibility Act (ECRA) program.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

With the exception of the 130 cylinders, Chronar has managed to remove all hazardous materials from the site. However, site security was terminated by Chronar on May 7, 1991, and the site is only partially fenced. The possibility of vandalism to the cylinders present the potential hazards of explosion, fire or gaseous toxic release. Given the high mobility of gases, any release of a toxic compound would threaten not only persons on-site but the surrounding population as well.

B. Threats to the Environment

Any release of the contents of the cylinders would cause a toxic release to the environment, which would expose animals and the food chain to hazardous substances.

C. Statutory and Regulatory Authorities

The following criteria from Section 300.415(b)(2) of the NCP are directly applicable to the Chronar site:

- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants, or contaminants;
- (iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- (vi) Threat of fire or explosion; and
- (vii) The lack of other Federal or state response mechanisms to respond to the release.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of extremely hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health or welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The objective of this project is to mitigate the threat of an uncontrolled gaseous release from one or more of the 130 cylinders presently located at the Chronar site. The proposed mitigative measures include the disposal of cylinders of known content at an approved off-site facility. Any cylinders' contents which can not be verified will require on-site treatment by contractors specializing in the sampling, treatment and disposal of compressed gas cylinders. Upon completion of this action all hazards presented by the cylinders will have been eliminated, thus negating the need for post removal site controls. The removal of these cylinders will complete the cleanup initiated by the PRP. Any additional remedial activity will be addressed through NJDEPE's ECRA program.

2. Contribution to remedial performance

The Chronar site has not been designated an NPL site. The proposed actions will address the threats as described in Section III of this document. Based upon available information, the proposed actions will not impede future response actions.

3. Description of alternative technologies

The only feasible technology for mitigating the threats at this site is the method described above in Section V. A. 1. Disposal technologies will be evaluated once the sampling data for the cylinders is received. Any technology selected will meet the selection criteria for effectiveness, implementability and cost. In addition, any hazardous substances disposed of will be taken to a facility which is in compliance with EPA's off-site policy.

4. EE/CA

Due to the extent and nature of the contamination and the resulting endangerment an immediate response is required. Therefore, this section is not applicable to this time-critical removal action.

5. **Applicable or Relevant and Appropriate Requirements (ARARs)**

ARARs within the scope of the action described herein, will be identified and attained. All CERCLA and RCRA regulatory concerns as they pertain to the transportation and disposal of these cylinders will be addressed.

6. **Project schedule**

Actual on-site work will require approximately one month. However, the time required to line up contractors, investigate disposal facilities and gain disposal acceptance will most likely be spread over a period of several months. Refer to Appendix III for a detailed breakdown of the project.

B. **Estimated Costs**

SUMMARY OF COSTS

Extramural Costs: All

Regional Allowance Costs:

Extramural Cleanup Contractor with Contingency	\$ 350,000
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Other Extramural Costs Not Funded
from the Regional Allowance:

Total TAT	\$ 25,400
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Subtotal, Extramural Costs	\$ 375,400
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20% Extramural Cost (Rounded)	\$ 75,000
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TOTAL EXTRAMURAL COSTS AND CONTINGENCIES (Rounded)	\$ 450,000
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Intramural Costs:

Intramural Direct Costs (HQ & Region)	\$ 6,600
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Intramural Indirect Costs	\$ 20,000
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TOTAL INTRAMURAL COSTS	\$ 26,600
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TOTAL REMOVAL PROJECT CEILING (ROUNDED)	\$ 475,000
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VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Because of deteriorating conditions and the lack of site security, any delay in the proposed action will increase the likelihood of an uncontrolled release from one or more of the cylinders. In the event of such a release, the health risks to persons and the environment on-site or down-wind of the site are imminent given the explosivity, flammability, and the mobility and toxicity of the compounds in question.

VII. OUTSTANDING POLICY ISSUES

No outstanding policy issues exist at this time.

VIII. ENFORCEMENT

Since its closure, Chronar's post-closure removal activities have been monitored by NJDEPE's ECRA program. Due to regulatory constraints on the treatment and disposal of the cylinders, NJDEPE has referred Chronar's handling of the cylinders to EPA. EPA and NJDEPE are coordinating, and will continue to coordinate, all enforcement actions for the Chronar site. Although the PRP has shown interest in completing the cleanup, it appears that funds may not be available to remove all of the remaining cylinders.

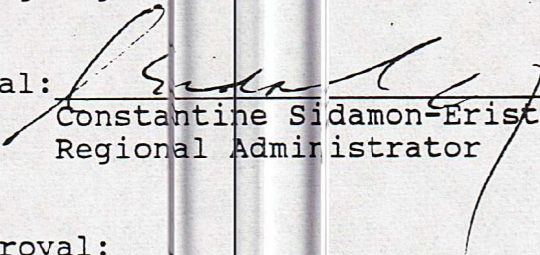
For the purpose of NCP consistency, EPA's enforcement strategy has been included as a separate addendum to this memorandum. See Appendix IV.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Chronar site in Lawrence Township, Mercer County, New Jersey, developed in accordance with CERCLA and not inconsistent with the NCP. This decision is based on the administrative record for the site.

Conditions at the site meet the criteria for a removal action under the NCP section 300.415(b)(2). I therefore recommend your approval of the proposed removal action. The total project ceiling if approved will be \$475,000 of which \$350,000 comes from the Regional removal allowance.

Please indicate your approval and authorization of funding for the Chronar site, per current Delegation of Authority, by signing below.

Approval: 
Constantine Sidamon-Eristoff
Regional Administrator

Date: 4/20/94

Disapproval: _____
Constantine Sidamon-Eristoff
Regional Administrator

Date: _____

cc: (after approval is obtained)

C. Sidamon-Eristoff, RA
B. Muszynski, DRA
K. Callahan, ERRD-D
R. Salkie, ERR-ADPEPP
J. Frisco, 2ERR-DINJP
G. Zachos, ERR-RAE
M. Pane, ERR-RAB
J. Marshall, 2EPD
D. Karlen, 2ORC-NJSUP
M. Hayden, ORC-NJSUP
R. Gherardi, OPM-FIN
D. Younger, PM-214F
R. Cahill, 2OEP
D. Dietrich, OS-210
L. Miller, NJDEPE
V. Krisak, NJDEPE
K. Kloo, NJDEPE
C. Moyik, ERRD-PS
C. Kelley, TATL
M. Mjoness, OS-210

CHRONAR CORPORATION SITE

ENFORCEMENT SENSITIVE

February 17, 1992

A. PRP Search

At the time it referred the site to EPA, NJDEPE was already monitoring the post-closure removal efforts being undertaken by Chronar. Chronar was, and continues to be, the only PRP for this site.

B. Notification of PRPs of Potential Liability and of the Required Removal Action

A Notice of Potential Liability has been issued to the PRP. The PRP was provided with an opportunity to meet with EPA, has responded and expressed a willingness to facilitate the necessary mitigative activities. However, the company is in Chapter 11 Bankruptcy, and has expressed doubts about its ability to undertake removal of the remaining cylinders.

C. Decision Whether to Issue an Order

Upon NJDEPE's referral of the site, EPA informed the PRP that the cylinder treatment proposal submitted to NJDEPE was technically inadequate. The PRP was afforded the opportunity to modify the proposal but was dilatory in its response; thus resulting in EPA's issuance of a Notice of Potential Liability. It is the agency's intention to issue a Unilateral Administrative Order (UAO) to the PRP, ordering the treatment and disposal of all compressed gas cylinders.

D. Negotiation and Order Issuance Strategy

Based upon the PRP's intent and financial capabilities as stated in the UAO response, EPA will make a determination whether or not to undertake the activities described in this memorandum.

TABLE 1
CHRONAR SITE
 Summary of Potential Toxicological
 Effects of Selected Identified Compounds

1. TOXIC BY INHALATION, INGESTION OR DERMAL CONTACT								
2. CENTRAL NERVOUS SYSTEM EFFECTS								
3. EYE, SKIN, RESPIRATORY, OR MUCOUS MEMBRANE IRRITANT								
4. KIDNEY DAMAGE								
5. LIVER DAMAGE								
6. BLOOD SYSTEM EFFECTS								
7. ASPHYXIANT								
Phosphine*		X	X	X	X			
Diborane*		X	X	X	X	X		
Silane*		X		X				
Germane*					X	X	X	
Tungsten Hexafluoride		X		X				
Hydrogen Sulfide		X		X				
Boron Trichloride		X		X				
Ethylene								X
Methane								X
Deuterium								x

* Known Toxicological effects may be incomplete due to pyrophoric nature of compounds

Chronar
11-07
AC file

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Rick Engel, Esquire
Chief Hazardous Waste Section
CN 112
R.J. Hughes Justice Complex
Trenton, New Jersey 08625

Dear Mr. Engel:

This letter is formal notification to the State of New Jersey that the United States Environmental Protection Agency plans to issue an Administrative Order on Consent pursuant to Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §9606. This Administrative Order on Consent (the "Order") mandates that the Respondent agree to perform the Removal Action to properly treat and dispose of approximately 126 compressed gas cylinders, at the Chronar Corporation facility, located at 330 Bakers Basin Road in Lawrence Township, Mercer County, New Jersey.

Be further advised that because the Administrative Order on Consent embodies a settlement of the United States Environmental Protection Agency's and the United States Department of Justice's claims against the Respondent, Section 122(i) of CERCLA requires a 30 day comment period and publication in the Federal Register. At the conclusion of the 30 day comment period, if no comments are received that reveal facts or considerations the Administrative Order on Consent is inappropriate, improper or inadequate, the Order will be effective after the Regional Administrator of the United State Environmental Protection Agency executes the Order.

Should you have any further questions or need additional information, please contact me at (212) 264-3148.

Sincerely yours,

Melva J. Hayden
Assistant Regional Counsel
New Jersey Superfund Branch

cc: R. Lehr, Esq., Deputy Attorney General
V. Krisak, DEPE
M. Gruzlovic, DEPE/RPSR/BBA ✓
D. Triggs, DEPE/RPSR/CFO
S. Santora, DEPE/DPFSR
R. Lawrence, Esq., DOJ
P. Kizel, Esq.
C. Loeb

BRADY,

HERE ARE SOME OF MY
FILES ON THE CHRONAR FACILITY.
YOU MAY ALREADY HAVE SOME.
I'LL SUBMIT TO YOU EPA'S
FINAL REPORT ONCE I GET IT.


DAVE T.

SITE ASSESSMENT

PROGRESS POLREP

I. HEADING

DATE: September 2, 1992

FROM: Donald R. Graham, OSC 
Region II, Removal Action Branch

TO: K. Callahan, EPA
R. Salkie, EPA
J. Frisco, EPA
J. Marshall, EPA
G. Zachos, EPA
M. Pane, EPA
D. Karlen, EPA
M. Hayden, EPA
L. Miller, NJDEPE
V. Krisak, NJDEPE
D. Triggs, NJDEPE ✓
ERD, Washington (E-Mail)
TAT

SUBJECT: Chronar Corporation Site
Lawrence Township, Mercer County, New Jersey

POLREP: One (1) and Final

II. BACKGROUND

SITE NO.:	8A
DELIVERY ORDER NO.:	N/A
RESPONSE AUTHORITY:	CERCLA
NPL STATUS:	Non-NPL
STATE NOTIFICATION:	NJDEP Notified
STATUS OF ACTION MEMORANDUM:	Approved April 20, 1992
START DATE:	July 13, 1992
COMPLETION DATE:	August 26, 1992
DEMobilization DATE:	September 2, 1992

III. INCIDENT INFORMATION

A. Situation:

The Chronar Corporation site is located at 313 Lawrence Station Road in Lawrence Township, Mercer County, New Jersey. The site was used for the research and production of solar panel products from 1979 until 1989 when facility operations ceased as the result of bankruptcy. During the period of April to October, 1991, Chronar conducted the removal of hazardous materials from the site with oversight by the New Jersey Department of Environmental Protection and Energy

(NJDEPE). Upon completing the 1991 removal, a total of 127 compressed gas cylinders remained on-site. These remaining cylinders were unshippable, required on-site treatment, and contained a variety of explosive, flammable and toxic gases. Lacking the regulatory authority for on-site treatment of the cylinders, NJDEPE referred the Chronar cylinders to EPA for removal action eligibility.

Upon determining the site's eligibility for removal action funding, an Action Memorandum was approved. Funds approved in the Action Memorandum were however not required, as EPA was able to negotiate an Administrative Consent Order (ACO) with Chronar to undertake the required activities. Chronar's cylinder remediation contractor, Earth Resources Corporation (ERC) of Ocoee, Florida, initiated mobilization on July 13, 1992.

B. Actions Taken:

Upon completing the mobilization of their cylinder treatment equipment known as the Cylinder Recovery Vessel; ERC conducted a site tour and equipment overview on July 17, 1992. In attendance were representatives from Chronar and the following agencies: EPA, NJDEPE, Mercer County Health Department and Lawrence Township Fire Department.

Upon completing the test-run of an empty cylinder on July 21, 1992, cylinder treatment operations began on July 22, 1992. Operations continued through August 26, 1992, with a total of 131 cylinders being treated without incident. During the course of treatment operations, one of the following three opening techniques was utilized for each of the 131 cylinders: steel projectile, remote valve opening and cold tap drilling. All of the emptied cylinders were cut in half to render them unusable, decontaminated as needed, and disposed of as scrap steel.

C. Next Steps

Site jurisdiction will be restored to the NJDEPE for any future environmental concerns.

D. Key Issues

During the ACO negotiation process it became apparent that Chronar's bankruptcy trustees had limited financial capabilities by which to fund the cylinder remediation activities. Consequently, EPA agreed to a Settlement of Claims as part of the negotiated terms of the ACO agreement. The Settlement of Claims stipulated that EPA would waive claims for past response costs and response costs to be incurred up to the completion of the removal action. As a matter of process, an announcement was placed in the Federal

Register detailing the terms of the ACO including the removal action and the settlement of claims.

During the course of removal activities at Chronar, the initial 127 cylinders was increased to a total of 131 cylinders. This increase of 4 cylinders was the direct result of additional cylinders being discovered in the Consolidated Freight Warehouse in Port Newark, New Jersey on August 4, 1992. The additional 4 cylinders had been enroute to Chronar customers at the time of Chronar's bankruptcy and had been abandoned ever since. These cylinders were clearly labeled and in DOT shippable containers, thus enabling their shipment to Chronar for processing while ERC was on-site.

IV. COST INFORMATION

As discussed in preceeding paragraphs of this document, the Chronar removal action was funded in its entirety by the responsible party. Furthermore, costs incurred by EPA have been waived as part of the stipulated terms of the ACO agreement.

Further
POLREPS Forthcoming

Final
POLREP XXX